ST-SE500

SERVICE MANUAL

AEP Model
UK Model

SPECIFICATIONS

FM tuner section

Frequency range	87.5 - 108.0 MHz
Aerial terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	at 26 dB quieting (mono) 10.3 dBf, 0.9 µV/75Ω at 46 dB quieting (stereo) 38.5 dBf, 23 µV/75Ω
Usable sensitivity (IHF)	10.3 dBf, 0.9 µV/75Ω
S/N	at 40 kHz deviation 74 dB (mono), 69 dB (stereo)
Harmonic distortion	0.1 % (mono), 0.2 % (stereo)
Frequency response	30 Hz - 15 kHz (+0.5/–1.0 dB)
Separation	40 dB at 1 kHz
Selectivity	at 400 kHz 80 dB at 300 kHz 60 dB
Output	at 40 kHz deviation 600 mV

AM tuner section

Frequency range	MW: 522 - 1,611 kHz (9 kHz step) LW: 144 - 288 kHz (1 kHz step)
Intermediate frequency	450 kHz
Usable Sensitivity	(with AM loop aerial) MW: 300 µV/m LW: 1 mV/m
Signal-to-noise ratio	MW: 54 dB (50 mV/m, 999 kHz) LW: 50 dB (50 mV/m, 216 kHz)
Harmonic distortion	0.3% (50 mV/m, 400 Hz)
Selectivity	32 dB

General

Power requirements	220-230 V, AC 50/60 Hz
Power consumption	10 W
Input impedance	75 ohms
Input connector	IEC-male
Dimensions	430 x 82 x 295 mm (w/h/d)
Weight	2.7 kg
Supplied accessories	Audio cord (1) AM loop aerial (1) FM wire aerial (1) EON control cord (1)

Design and specifications are subject to change without notice.

FM STEREO FM-AM TUNER

SONY®

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

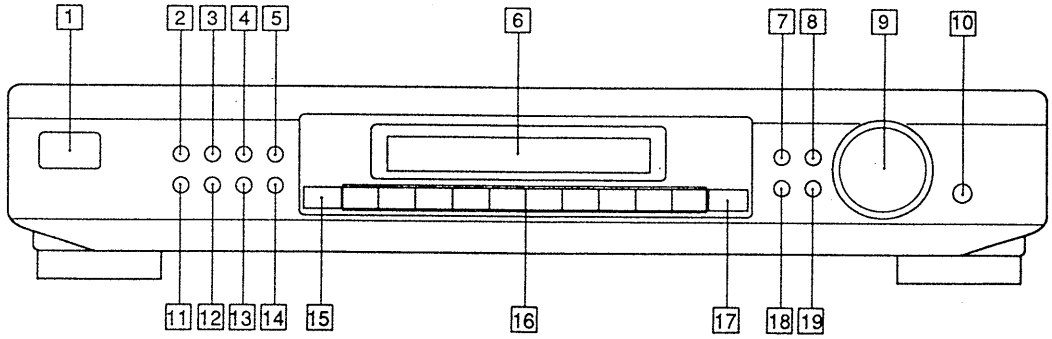
MODEL IDENTIFICATION
— BACK PANEL —

PARTS No.	MODEL
4-981-268-2□	AEP, G, EE
4-981-268-5□	UK

• Abbreviation
G : German model
EE : East European model

SECTION 1
GENERAL

Location of Controls



1 POWER switch
2 TA button
3 NEWS/INFO button
4 PTY button
5 DISPLAY button
6 Display window
7 CHAR button
8 TUNE MODE button
9 TUNING/SELECT knob
10 ENTER button
11 AUTO-BETICAL SELECT button
12 MEMORY button
13 FM MODE button
14 BAND button
15 SHIFT button
16 Preset button
17 DIRECT button
18 MENU button
19 RETURN button

SECTION 2
TEST MODE

1. Circuit Check Mode

Set to the reception frequency that the circuit can STEREO RDS stations. (Set the input level to above 70 dB.)
This enables circuit check to be performed in any of the reception modes-FM, AM (MW, LW). Set to a desired band before setting the test mode.

1. Turn OFF the power.
2. While pressing [4] and [AUTO-BETICAL SELECT] together, turn ON [POWER].

• The items in the following table will be checked automatically in order every 2 seconds.

Display	Items	DISPLAY		NG
		FM RDS	AM (MW, LW)	
Tuned	$\overline{\text{AST}}$ signal =LOW	OK or NG		IC201 NG, RV201 adjustments
IF Frq	IF COUNT OK	OK or NG	OK or NG	TB101, IC201 NG, or IF count buffer amp (IC801) NG
Sig Level	SI LEVELh70dB	OK or NG	OK or NG	TB101 NG
Stereo	$\overline{\text{ST}}$ signal=LOW	OK or NG		TB101 NG
RDS Signal	RDS DATA OK	OK or NG		IC802 NG

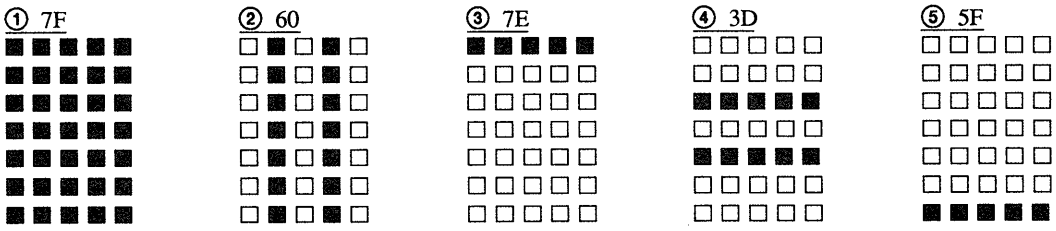
NOTE : The preset data will be erased when this test mode is used. Therefore, take down the data before setting this mode and preset the data again after completing operations in this mode.

2. Display Tube Check and KEY Check mode

1. Turn OFF the power.
2. While pressing [1] and [AUTO-BETICAL SELECT] together, turn ON [POWER] .
3. While continuously pressing [1] and [AUTO-BETICAL SELECT] together, check the following.

Microcomputer version indication (1 sec) → All light up "7F" → Dot area only "60" → Dot area only "7E" → Dot area only "3D" → Dot area only "5F" → (back to All light up "7F")

Indication test pattern



* The indication test patterns from ② to ⑤ are indicated on only even grids.

The display changes every 1 sec.

4. Release [1] and [AUTO-BETICAL SELECT] . The KEY CHECK mode will be set.

5. All key numbers will be displayed.
   Key Number : 25

6. Each time the key is pressed, the key number will be counted down.
   Each key will be counted only once, at the first time.

7. When all keys have been pressed, the process will end.

NOTE : As contents of the Factory Preset will be written into memory after completing this check mode, delete contents of memory according to 4. Forced RESET.

3. Entering the Factory Preset (In case perform just to write memory of the Factory Preset.)

1. Turn OFF the power.
2. While pressing [3] and [AUTO-BETICAL SELECT] together, turn ON [POWER] .

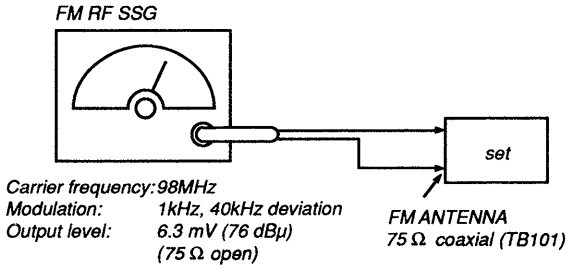
4. Forced RESET (Used to delete the contents of Factory Preset when it is written into the preset memory.)

Clears all the RAMs and sets the initial state

1. Turn OFF the power.
2. While pressing [5] and [AUTO-BETICAL SELECT] together, turn ON [POWER] .
3. When "All clear" is indicated on the fluorescent display tube, it means that "Forced Reset" has been completed.

SECTION 3
ELECTRICAL ADJUSTMENTS

FM Signal Level Adjustment

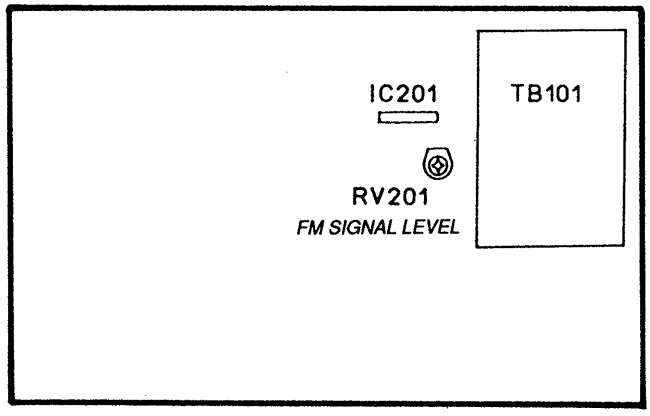


Procedure:

1. Tune the set to 98 MHz.
2. Push the DISPLAY button for digital signal meter indication.
3. Adjust RV201 to the place where level and "70dB ⬆" indication lights on fluorescent indicator tube.

Adjustment Location:

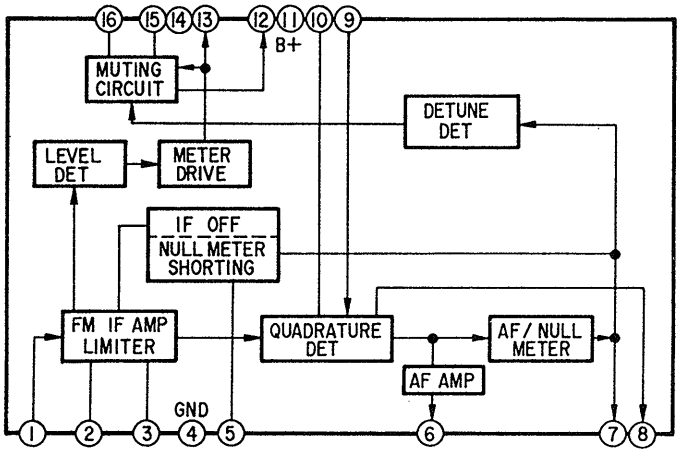
[TUNER BOARD] — Component Side —



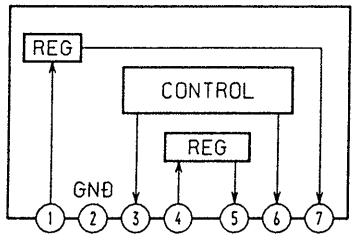
SECTION 4
DIAGRAMS

4-1. IC BLOCK DIAGRAMS

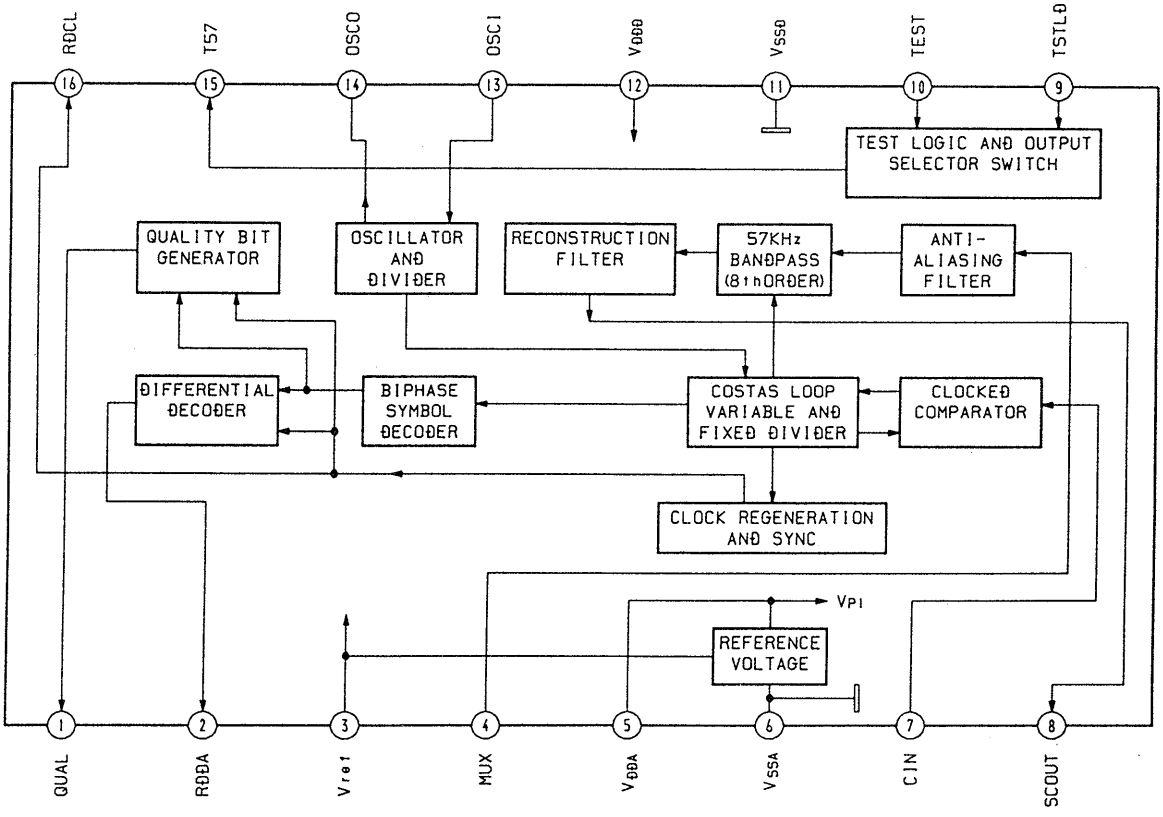
IC201 LA1235



IC901 LA5667

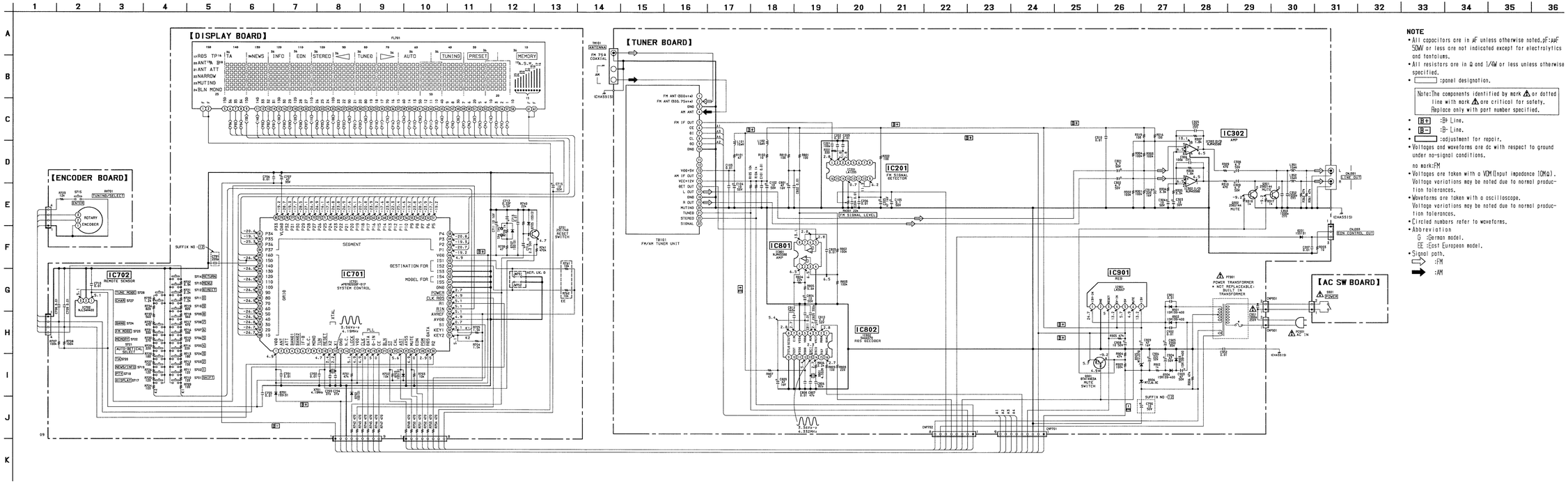


IC802 SAA6579



4-2. SCHEMATIC DIAGRAM

- See page 6 for IC Block Diagrams
- See page 14 for IC Pin Function. (IC701)



NOTE

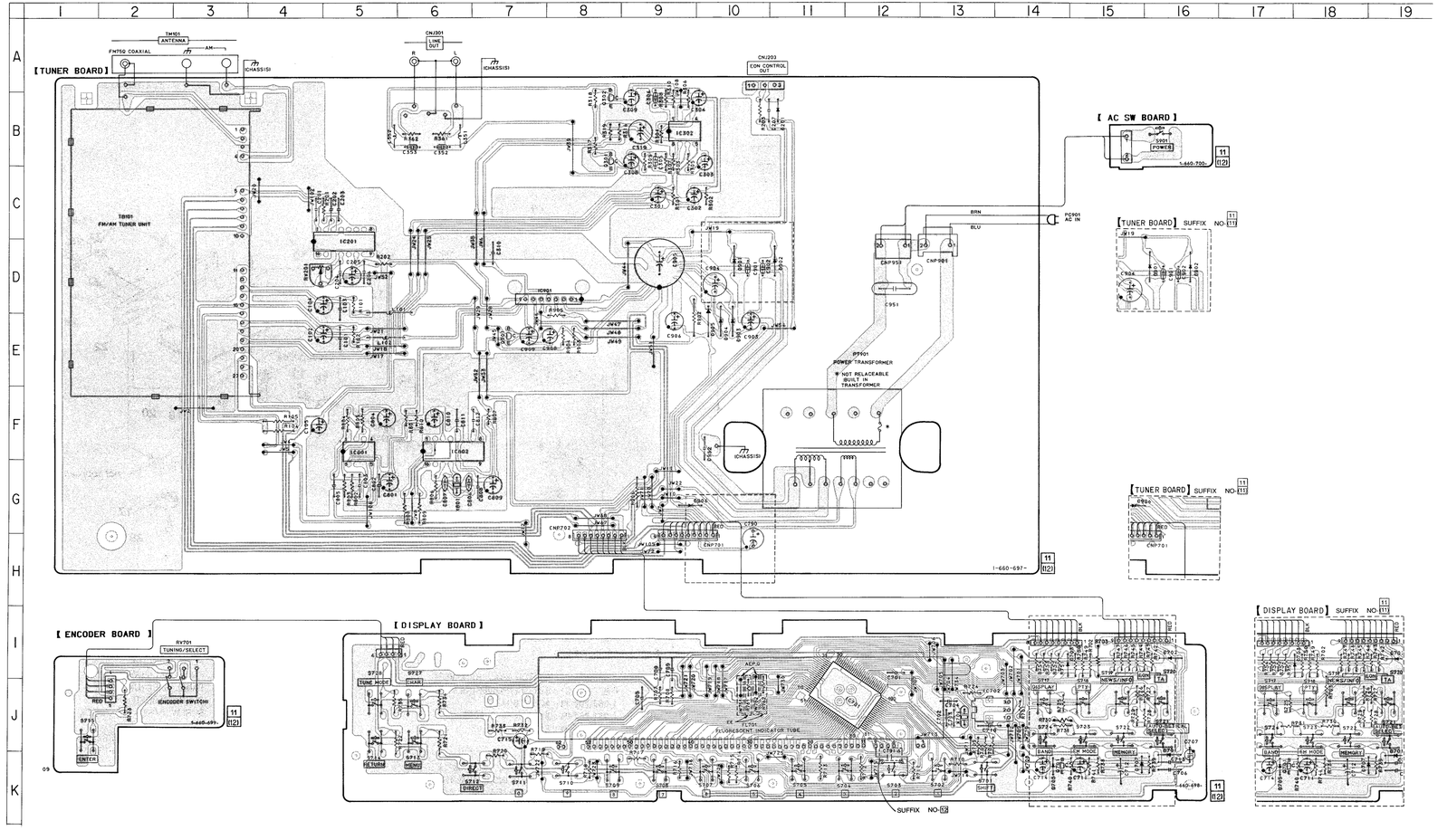
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- B+ : B+ Line.
- B− : B− Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.

  no mark: FM
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Abbreviation
  G : German model.
  EE : East European model.
- Signal path.
  ⇨ : FM
  ➡ : AM

4-3. PRINTED WIRING BOARD



• **Semiconductor Location**

Ref. No.	Location
D201	B-11
D701	K-17
D702	I-17
D703	I-15
D705	K-15
D707	K-16
D901	D-11
D902	D-11
D903	E-11
D904	E-11
D905	E-10
D906	G-10
IC201	D-6
IC302	B-10
IC701	J-12
IC702	J-14
IC801	F-16
IC802	F-7
IC901	D-8
Q301	B-9
Q302	B-9
Q701	K-15
Q901	E-8

Note:
- ⟜—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- □ : parts mounted on the conductor side.
- ▨ : Pattern from the side which enable seeing.
- Abbreviation
  G : German model.
  EE : East European model.

4-4. IC PIN FUNCTION

• **IC701 System Control (μPD780205GF-017-3BA)**

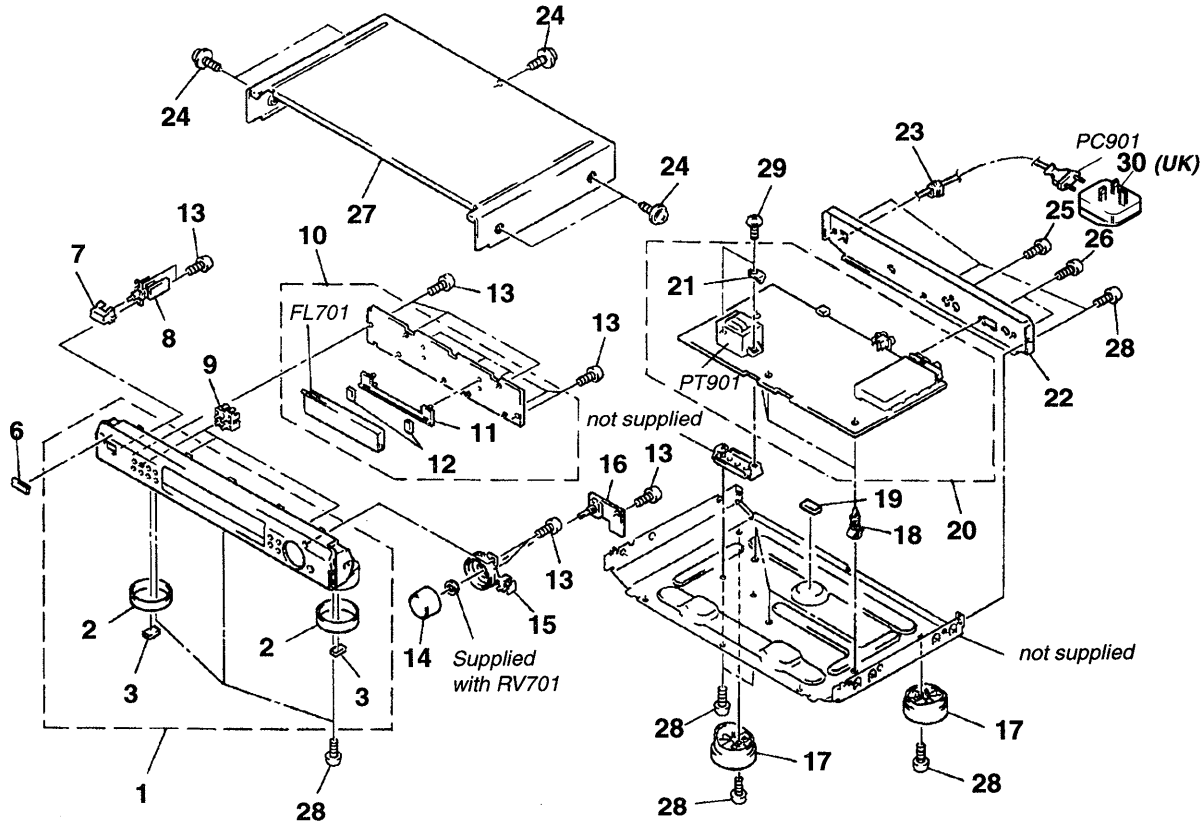
Pin No.	Pin Name	I/O	Function
1	VDD	—	Power supply (+5V).
2	NC	—	Not used. (Open)
3	NC	—	Not used. (Open)
4	NC	—	Not used. (Open)
5	NC	—	Not used. (Open)
6	NC	—	Not used. (Open)
7	NC	—	Not used.(Open)
8	NC	—	Not used. (Open)
9	NC	—	Not used. (Open)
10	$\overline{\text{RESET}}$	I	System reset input.
11	X2	O	Oscillation signal output (4.19MHz).
12	X1	I	Oscillation signal input (4.19MHz).
13	GND	—	Ground.
14	NC	—	Not used. (Open)
15	$\overline{\text{LOCK}}$	I	Lock signal input.
16	VDD	—	Power supply (+5V).
17	$\overline{\text{CLK}}$	O	PLL data to TB101.
18	DATA	O	PLL data to TB101.
19	D-IN	I	PLL data from TB101.
20	CE	O	PLL Latch to TB101.
21	$\overline{\text{BLN}}$	—	Not used. (Open)
22	$\overline{\text{ST}}$	I	Stereo display detection.
23	CAL	—	Not used. (Open)
24	AST	I	Auto stop signal detection.
25	AVSS	—	Ground.
26	MUTE	O	Muting signal output.
27	E ON	O	External control.
28	$\overline{\text{PGM}}$	—	Not used. (Open)
29	DATA RDS	I	RDS data input.
30	R2	O	Rotary encoder phase detection.
31	KEY 2	I	Key input.
32	KEY 1	I	Key input.
33	SI	I	Signal input.
34	AVDD	—	Analog power supply (+5V).
35	AVREF	I	Reference voltage (+5V).
36	$\overline{\text{R IN}}$	I	Remote control input.
37	R 1	I	Rotary encoder number of rotation detection.
38	$\overline{\text{RDS CLK}}$	I	RDS data clock input.
39	$\overline{\text{POWER}}$	I	Power supply ON/OFF monitor.
40	GND	—	Ground.

Pin No.	Pin Name	I/O	Function
41	IS 5	I	Model detection.
42	IS 4	I	
43	IS 3	I	
44	IS 2	I	
45	IS 1	I	
46	V_{DD}	—	Power supply (+5V).
47 to 78	P_1 to P_{32}	O	Drives indication tube.
79	V LOAD	—	Power supply (–30V).
80	P33	O	Drives indication tube.

SECTION 5
EXPLODED VIEWS

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (RED)
  ↓
  Cabinets color
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of this parts list.
- Abbreviation
  G : German model
  EE : East European model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.



Ref. No.	Part No.	Description	Remark
1	X-4947-320-1	PANEL ASSY, FRONT (BLACK)	
1	X-4948-556-1	PANEL ASSY, FRONT (SILVER)	
2	4-977-593-11	RING (DIA. 50), ORNAMENTAL	
3	4-977-358-11	CUSHION (8X12.5)(BLACK)	
6	4-963-404-21	EMBLEM (5-A), SONY	
7	4-977-589-11	BUTTON (POWER)(SILVER)	
7	4-977-589-21	BUTTON (POWER)(BLACK)	
* 8	1-660-700-11	AC SW BOARD	
9	4-981-264-01	BUTTON (4)(BLACK)	
9	4-981-264-21	BUTTON (4)(SILVER)	
* 10	A-4389-852-A	DISPLAY BOARD, COMPLETE (AEP,UK,G)	
* 10	A-4389-853-A	DISPLAY BOARD, COMPLETE (EE)	
* 11	4-945-292-01	HOLDER, INDICATION TUBE	
* 12	4-921-941-01	CUSHION (FL)	
13	4-951-620-01	SCREW (2.6X8), +BVTP	
14	X-4947-321-1	KNOB (VOL) ASSY (BLACK)	
14	X-4947-626-1	KNOB (VOL) ASSY (SILVER)	
15	4-981-265-01	ESCUTCHEON (BLACK)	
15	4-981-265-11	ESCUTCHEON (SILVER)	
* 16	1-660-699-11	ENCODER BOARD	
17	X-4947-207-1	FOOT ASSY (F50150S)	

Ref. No.	Part No.	Description	Remark
* 18	3-346-265-31	HOLDER, PC BOARD	
19	9-911-840-XX	CUSHION, LS	
* 20	A-4389-850-A	TUNER BOARD, COMPLETE (AEP,UK,G)	
* 20	A-4389-851-A	TUNER BOARD, COMPLETE (EE)	
21	4-957-933-01	PLATE, GROUND	
* 22	4-981-268-21	PANEL, BACK (AEP,G,EE)	
* 22	4-981-268-51	PANEL, BACK (UK)	
23	3-703-244-00	BUSHING, CORD	
24	3-363-099-01	SCREW (CASE 3 TP2)(BLACK)	
24	3-363-099-11	SCREW (CASE 3 TP2)(SILVER)	
25	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
26	3-704-515-31	SCREW (BV/RING)	
* 27	4-978-901-51	CASE (407026)(BLACK)	
* 27	4-985-744-01	CASE (407026)(SILVER)	
28	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT(B)	
29	7-685-872-09	SCREW +BVTT 3X8 (S)	
⚠30	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT	
⚠PC901	1-575-651-21	CORD, POWER	
⚠PT901	1-423-525-11	TRANSFORMER, POWER	

SECTION 6
ELECTRICAL PARTS LIST

AC SW **DISPLAY**

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  G : German model
  EE : East European model

Ref. No.	Part No.	Description			Remark
*	1-660-700-11	AC SW BOARD			
		**********			
		< SWITCH >			
⚠S901	1-572-267-51	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)			
**********					
*	A-4389-852-A	DISPLAY BOARD, COMPLETE (AEP,UK,G)			
		**********			
*	A-4389-853-A	DISPLAY BOARD, COMPLETE (EE)			
		**********			
*	4-921-941-01	CUSHION (FL)			
*	4-945-292-01	HOLDER, INDICATION TUBE			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C702	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C703	1-162-209-31	CERAMIC	27PF	5% 50V	
C704	1-162-209-31	CERAMIC	27PF	5% 50V	
C705	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C706	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C707	1-126-947-11	ELECT	47uF	20% 35V	
C708	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C709	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C710	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C711	1-126-964-11	ELECT	10uF	20% 50V	
C712	1-104-905-11	CAPACITOR	0.22F	5.5V	
C713	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C714	1-124-257-00	ELECT	2.2uF	20% 50V	
C715	1-126-964-11	ELECT	10uF	20% 50V	
C791	1-162-286-21	CERAMIC	220PF	10% 50V	(SUFFIX NO-12)
		< DIODE >			
D701	8-719-815-85	DIODE 1S1585			
D702	8-719-815-85	DIODE 1S1585			
D703	8-719-815-85	DIODE 1S1585			
D705	8-719-815-85	DIODE 1S1585			
D707	8-719-815-85	DIODE 1S1585			

Ref. No.	Part No.	Description			Remark
		< FLUORESCENT INDICATOR >			
FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC701	8-759-377-58	IC uPD78205GF-017-3BA			
IC702	8-759-373-49	IC NJL54H400			
		< TRANSISTOR >			
Q701	8-729-119-78	TRANSISTOR 2SC2785			
		< RESISTOR >			
R701	1-249-437-11	CARBON	47K	5% 1/4W	
R702	1-249-429-11	CARBON	10K	5% 1/4W	
R703	1-249-429-11	CARBON	10K	5% 1/4W	
R704	1-249-419-11	CARBON	1.5K	5% 1/4W	
R705	1-249-419-11	CARBON	1.5K	5% 1/4W	
R707	1-249-441-11	CARBON	100K	5% 1/4W	
R708	1-249-441-11	CARBON	100K	5% 1/4W	
R709	1-247-807-31	CARBON	100	5% 1/4W	
R710	1-249-406-11	CARBON	120	5% 1/4W	
R711	1-249-406-11	CARBON	120	5% 1/4W	
R712	1-249-407-11	CARBON	150	5% 1/4W	
R713	1-249-408-11	CARBON	180	5% 1/4W	
R714	1-247-815-91	CARBON	220	5% 1/4W	
R715	1-249-410-11	CARBON	270	5% 1/4W	
R716	1-249-411-11	CARBON	330	5% 1/4W	
R717	1-249-413-11	CARBON	470	5% 1/4W	
R718	1-249-414-11	CARBON	560	5% 1/4W	
R719	1-249-416-11	CARBON	820	5% 1/4W	
R720	1-249-418-11	CARBON	1.2K	5% 1/4W	
R721	1-249-421-11	CARBON	2.2K	5% 1/4W	
R722	1-249-424-11	CARBON	3.9K	5% 1/4W	
R723	1-249-430-11	CARBON	12K	5% 1/4W	
R724	1-247-807-31	CARBON	100	5% 1/4W	
R725	1-249-406-11	CARBON	120	5% 1/4W	
R726	1-249-406-11	CARBON	120	5% 1/4W	
R727	1-249-407-11	CARBON	150	5% 1/4W	
R728	1-249-408-11	CARBON	180	5% 1/4W	
R729	1-247-815-91	CARBON	220	5% 1/4W	
R730	1-249-410-11	CARBON	270	5% 1/4W	
R731	1-249-411-11	CARBON	330	5% 1/4W	

DISPLAY | ENCODER | TUNER

Ref. No.	Part No.	Description			Remark
R732	1-249-413-11	CARBON	470	5%	1/4W
R733	1-249-414-11	CARBON	560	5%	1/4W
R734	1-249-416-11	CARBON	820	5%	1/4W
R735	1-249-418-11	CARBON	1.2K	5%	1/4W
R738	1-249-401-11	CARBON	47	5%	1/4W
R739	1-249-417-11	CARBON	1K	5%	1/4W
R740	1-247-863-91	CARBON	22K	5%	1/4W
R741	1-247-895-91	CARBON	470K	5%	1/4W
R742	1-249-413-11	CARBON	470	5%	1/4W
R743	1-249-413-11	CARBON	470	5%	1/4W
R744	1-249-413-11	CARBON	470	5%	1/4W
R745	1-249-413-11	CARBON	470	5%	1/4W
R746	1-249-413-11	CARBON	470	5%	1/4W
R747	1-249-413-11	CARBON	470	5%	1/4W
R749	1-249-413-11	CARBON	470	5%	1/4W
R750	1-249-413-11	CARBON	470	5%	1/4W
R751	1-249-413-11	CARBON	470	5%	1/4W
R752	1-249-413-11	CARBON	470	5%	1/4W
R753	1-249-413-11	CARBON	470	5%	1/4W
R754	1-249-413-11	CARBON	470	5%	1/4W
R761	1-249-429-11	CARBON	10K	5%	1/4W (EE)
R762	1-249-429-11	CARBON	10K	5%	1/4W (EE)
		< SWITCH >			
S701	1-554-303-21	SWITCH, TACTILE (SHIFT)			
S702	1-554-303-21	SWITCH, TACTILE (1)			
S703	1-554-303-21	SWITCH, TACTILE (2)			
S704	1-554-303-21	SWITCH, TACTILE (3)			
S705	1-554-303-21	SWITCH, TACTILE (4)			
S706	1-554-303-21	SWITCH, TACTILE (5)			
S707	1-554-303-21	SWITCH, TACTILE (6)			
S708	1-554-303-21	SWITCH, TACTILE (7)			
S709	1-554-303-21	SWITCH, TACTILE (8)			
S710	1-554-303-21	SWITCH, TACTILE (9)			
S711	1-554-303-21	SWITCH, TACTILE (0)			
S712	1-554-303-21	SWITCH, TACTILE (DIRECT)			
S713	1-554-303-21	SWITCH, TACTILE (MENU)			
S714	1-554-303-21	SWITCH, TACTILE (RETURN)			
S717	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
S718	1-554-303-21	SWITCH, TACTILE (PTY)			
S719	1-554-303-21	SWITCH, TACTILE (NEWS/INFO)			
S720	1-554-303-21	SWITCH, TACTILE (TA)			
S721	1-554-303-21	SWITCH, TACTILE (AUTO-BETICAL SELECT)			
S722	1-554-303-21	SWITCH, TACTILE (MEMORY)			
S723	1-554-303-21	SWITCH, TACTILE (FM MODE)			
S724	1-554-303-21	SWITCH, TACTILE (BAND)			
S727	1-554-303-21	SWITCH, TACTILE (CHAR)			
S728	1-554-303-21	SWITCH, TACTILE (TUNE MODE)			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X701	1-760-422-11	VIBRATOR, CRYSTAL (4.192MHz)			
**********					
*	1-660-699-11	ENCODER BOARD			
		**********			
		< VARIABLE RESISTOR >			
RV701	1-467-703-11	ENCODER, ROTARY (TUNING/SELECT)			
		< SWITCH >			
S715	1-554-303-21	SWITCH, TACTILE (ENTER)			
**********					
*	A-4389-850-A	TUNER BOARD, COMPLETE (AEP,UK,G)			
		**********			
*	A-4389-851-A	TUNER BOARD, COMPLETE (EE)			
		**********			
	4-957-933-01	PLATE, GROUND			
	7-685-872-09	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C101	1-162-306-11	CERAMIC	0.01uF	30%	16V
C102	1-126-964-11	ELECT	10uF	20%	50V
C103	1-162-306-11	CERAMIC	0.01uF	30%	16V
C104	1-126-964-11	ELECT	10uF	20%	50V
C105	1-124-463-00	ELECT	0.1uF	20%	50V
C201	1-162-282-31	CERAMIC	100PF	10%	50V
C202	1-162-306-11	CERAMIC	0.01uF	30%	16V
C203	1-162-306-11	CERAMIC	0.01uF	30%	16V
C204	1-162-306-11	CERAMIC	0.01uF	30%	16V
C205	1-126-967-11	ELECT	47uF	20%	16V
C206	1-162-306-11	CERAMIC	0.01uF	30%	16V
C207	1-162-306-11	CERAMIC	0.01uF	30%	16V
C301	1-126-963-11	ELECT	4.7uF	20%	50V
C302	1-126-963-11	ELECT	4.7uF	20%	50V
C303	1-126-964-11	ELECT	10uF	20%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-110-335-11	MYLAR	100PF	5%	50V
C306	1-110-335-11	MYLAR	100PF	5%	50V
C308	1-126-963-11	ELECT	4.7uF	20%	50V
C309	1-126-963-11	ELECT	4.7uF	20%	50V
C310	1-162-306-11	CERAMIC	0.01uF	30%	16V
C319	1-126-934-11	ELECT	220uF	20%	16V
C352	1-130-471-00	MYLAR	0.001uF	5%	50V
C353	1-130-471-00	MYLAR	0.001uF	5%	50V
C790	1-126-964-11	ELECT	10uF	20%	50V (SUFFIX NO-12)
C801	1-126-967-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description			Remark
C802	1-162-306-11	CERAMIC	0.01uF	30%	16V
C803	1-162-306-11	CERAMIC	0.01uF	30%	16V
C804	1-126-964-11	ELECT	10uF	20%	50V
C805	1-162-288-31	CERAMIC	330PF	10%	50V
C806	1-102-527-11	CERAMIC	82PF	5%	50V
C807	1-102-852-91	CERAMIC	47PF	5%	50V
C808	1-162-306-11	CERAMIC	0.01uF	30%	16V
C809	1-126-967-11	ELECT	47uF	20%	16V
C810	1-126-961-11	ELECT	2.2uF	20%	50V
C811	1-162-306-11	CERAMIC	0.01uF	30%	16V
C812	1-162-291-31	CERAMIC	560PF	10%	50V
C901	1-101-004-00	CERAMIC	0.01uF		50V
C902	1-101-004-00	CERAMIC	0.01uF		50V
C903	1-126-967-11	ELECT	47uF	20%	50V
C904	1-126-967-11	ELECT	47uF	20%	50V
C905	1-126-953-11	ELECT	2200uF	20%	35V
C906	1-126-969-11	ELECT	220uF	20%	50V
C908	1-126-964-11	ELECT	10uF	20%	50V
C909	1-126-967-11	ELECT	47uF	20%	16V
⚠C951	1-113-915-11	CERAMIC	0.001uF	20%	250V
C952	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CNJ203	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL OUT)			
CNJ301	1-568-250-11	JACK, PIN 2P (LINE OUT)			
* CNP701	1-568-936-11	PIN, CONNECTOR 9P			
* CNP702	1-568-935-11	PIN, CONNECTOR 8P			
CNP901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
CNP951	1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D201	8-719-815-85	DIODE 1S1585			
D901	8-719-970-02	DIODE 1SR139-400			
D902	8-719-970-02	DIODE 1SR139-400			
D903	8-719-970-02	DIODE 1SR139-400			
D904	8-719-970-02	DIODE 1SR139-400			
D905	8-719-110-69	DIODE RD27ES-B4			
D906	8-719-109-97	DIODE RD6.8ES-B2			
		< IC >			
IC201	8-759-812-35	IC LA1235			
IC302	8-759-634-51	IC M5218AP			
IC801	8-759-634-51	IC M5218AP			
IC802	8-759-169-99	IC SAA6579			
IC901	8-759-820-09	IC LA5667			
		< COIL >			
L101	1-410-509-11	INDUCTOR 10uH			
L102	1-410-509-11	INDUCTOR 10uH			
L351	1-410-509-11	INDUCTOR 10uH			
L352	1-410-509-11	INDUCTOR 10uH			

Ref. No.	Part No.	Description			Remark
		< TRANSFORMER >			
⚠PT901	1-423-525-11	TRANSFORMER, POWER			
		< TRANSISTOR >			
Q301	8-729-922-37	TRANSISTOR 2SD2144S			
Q302	8-729-922-37	TRANSISTOR 2SD2144S			
Q901	8-729-029-56	TRANSISTOR DTA144ESA			
		< RESISTOR >			
R101	1-249-401-11	CARBON	47	5%	1/4W
R102	1-249-393-11	CARBON	10	5%	1/4W
R104	1-249-417-11	CARBON	1K	5%	1/4W
R105	1-249-429-11	CARBON	10K	5%	1/4W
R201	1-249-411-11	CARBON	330	5%	1/4W
R202	1-249-405-11	CARBON	100	5%	1/4W
R203	1-249-393-11	CARBON	10	5%	1/4W
R301	1-249-441-11	CARBON	100K	5%	1/4W
R302	1-249-441-11	CARBON	100K	5%	1/4W
R303	1-249-441-11	CARBON	100K	5%	1/4W
R304	1-249-441-11	CARBON	100K	5%	1/4W
R305	1-247-843-11	CARBON	3.3K	5%	1/4W
R306	1-247-843-11	CARBON	3.3K	5%	1/4W
R307	1-249-420-11	CARBON	1.8K	5%	1/4W
R308	1-249-420-11	CARBON	1.8K	5%	1/4W
R309	1-249-413-11	CARBON	470	5%	1/4W
R310	1-249-413-11	CARBON	470	5%	1/4W
R316	1-249-405-11	CARBON	100	5%	1/4W
R317	1-249-417-11	CARBON	1K	5%	1/4W
R318	1-249-417-11	CARBON	1K	5%	1/4W
R319	1-249-405-11	CARBON	100	5%	1/4W
R361	1-249-437-11	CARBON	47K	5%	1/4W
R362	1-249-437-11	CARBON	47K	5%	1/4W
R801	1-249-405-11	CARBON	100	5%	1/4W
R802	1-249-441-11	CARBON	100K	5%	1/4W
R803	1-249-441-11	CARBON	100K	5%	1/4W
R804	1-247-863-91	CARBON	22K	5%	1/4W
R805	1-249-426-11	CARBON	5.6K	5%	1/4W
R806	1-249-421-11	CARBON	2.2K	5%	1/4W
R807	1-249-401-11	CARBON	47	5%	1/4W
R808	1-247-815-91	CARBON	220	5%	1/4W
R809	1-247-807-31	CARBON	100	5%	1/4W
R810	1-249-405-11	CARBON	100	5%	1/4W
R902	1-247-752-11	CARBON	1K	5%	1/2W
R903	1-249-441-11	CARBON	100K	5%	1/4W
R904	1-249-437-11	CARBON	47K	5%	1/4W
R905	1-249-437-11	CARBON	47K	5%	1/4W
R906	1-249-437-11	CARBON	47K	5%	1/4W
		< VARIABLE RESISTOR >			
RV201	1-241-765-11	RES, ADJ, CARBON 22K			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

TUNER

Ref. No.	Part No.	Description	Remark
		< ENCAPSULATED >	
TB101	1-233-596-12	ENCAPSULATED COMPONENT (TUNER UNIT)	(AEP,UK,G)
TB101	1-233-526-12	ENCAPSULATED COMPONENT (TUNER UNIT)(EE)	
		< TERMINAL >	
TM101	1-537-488-11	TERMINAL BOARD (ANT)(ANTENNA)	
		< VIBRATOR >	
X801	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	

****

MISCELLANEOUS
****

⚠30	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT	
⚠PC901	1-575-651-21	CORD, POWER	
⚠PT901	1-423-525-11	TRANSFORMER, POWER	

****

ACCESSORIES & PACKING MATERIALS
****

1-501-594-11	ANTENNA (FM)	
1-501-721-11	ANTENNA (LOOP)	
1-558-271-11	CORD, CONNECTION (AUDIO 108cm)	
1-765-383-11	CORD (WITH CONNECTOR)	
3-856-667-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH,SPANISH,PORTUGUESE)(AEP,UK)	
3-856-667-21	MANUAL, INSTRUCTION (GERMAN,DUTCH,SWEDISH,ITALIAN)(AEP)	
3-856-667-41	MANUAL, INSTRUCTION (ENGLISH,POLISH)(EE)	
3-856-667-51	MANUAL, INSTRUCTION (GERMAN)(G)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-960-718-12
(Including 9-960-718-81)

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Home A&V Products Company

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